

SV-0808M

Final Report

Site: Manus	Dates on Site: 18 - 29 August 2008
Team Members: Troy Culkan Mike Ryczek Kevin Widener	Required Items & Other Actions: <ul style="list-style-type: none"> • MMCR waveguide & cables - MR to hand-carry from Darwin • Power line - KK to purchase and ship • AWS METconsole computer from Darwin, prepare and ship - KK • DS hardware from MacDuff (on site) • DS hardware procedures from MacDuff (on site) • Fiber cable for E-Van from Darwin (on site) • Arrange for local contractor to do I/D-Van floor during visit. • Equipment from Eagan for coms check between Lombrum and Momote • MPL serial cable ship from Darwin - KK • Procure PBX system in Darwin for Manus - KK • Procure & ship Kiosk UPS battery to Manus - KK • MET MI70LINK software & cable (en route) • Procure and ship BBSS GCS molecular sieve desiccant - TC to hand-carry 2 jars, ship 1 jar (on site) • MMCR tool kit (on site)
Task Summary:	Safety: <u>Major Hazards:</u> Caustic chemicals (KOH), Explosive gas (H2), AC electricity <u>Hazard Controls:</u> BOM Electrolyser Handbook, BM Electrolyzer Operations/Maintenance Training, ASNZS 4836/2001-Safe Working on LV Electrical Installations, 2-man rule When replacing items (e.g., desiccant, filters, etc.), record and report the quantity of spares left on site.

SITE TASKS

High priority / usually non-routine

Low priority / usually routine

Completed

Priority	System	Date Completed (dd/Month)	Service Time (hours)	Tasks For each priority item insert new line (row) for each date/time entry
1	DS			Upgrade DS hardware - Contact mentor (Macduff)
		18-Aug	1	Hardware located and removed from packing crates
		19-Aug	4	Hardware installed and Matt Macduff, Dick Eagan notified
		23-Aug	2	Error on boot up, Matt contacted
		24-Aug	3	Worked with Matt to resolve problem, Disk reinitiating in progress
		26-Aug	2	Store vault to be sent to Darwin for diagnostics
2	MMCR			Replace waveguide & cables w/ Widener
		18-Aug		Cables yet to be located
		19-Aug		Cables located in Darwin office
		20-Aug		Kevin Widener installed one cable using PNNL stock from calibration kit
3	WND			Lower MET tower, hold each anemometer still, view data to see if one reports about 0.3m/sec (it should be 0.0), and troubleshoot
		22-Aug		Mast lowered and anemometers held still, upper wind speed 0 lower wind speed read up to 4m/s at times
4	MET			Install MI70LINK software & RS-232 cable
		18-Aug		For use during calibration site visits by technician
5	VANS			Oversee local electrician install of small switch board in storage can to separate light & power circuits
				Local electrician unavailable during this site visit
6	ORG			Connect ORG lens heater cable
		18-Aug	0.5	Lens heater cable connected
7	ORG			Replace ORG cable
		18-Aug	0.5	ORG cable inspected, OK

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8	OTHER			Check ARM Kiosk
		20-Aug		Kiosk continued operation to be reviewed
9	OTHER			Replace ARM Kiosk UPS battery
		20-Aug		Not required until Kiosk review complete
10	PWR			Relocate power line under new canopy
		22-Aug	1	Locate required materials
		23-Aug	4	Power cable in place awaiting local electrician to complete installation
11	VANS			I- and D-Van floor repair
				Insufficient time and local labor not available during this site visit
12	IOP-MJO			Test coms between Lombrum and Momote for Chuck Long IOP in 2010 - LJ to follow up
				?
13	AWS			Replace METconsole laptop with a dedicated computer
		19-Aug	3	Metconsole PC reloaded with Corepc and Metcosole software installed.
14	OTHER			Install time card system w/ Hymson's coordination
		20-Aug		Under review by LJ
15	COMM			Troubleshoot Iridium phone
		17-Aug		Larry has found no fault during use
16	COMM			Troubleshoot D-Van Internet connection
		19-Aug	1	D-Van internet connection working after system checks by Dick Eagan
17	COMM			Replace VSAT antenna bolts (bolts should be on site)
		20-Aug	8	In progress
		21-Aug	6	Completed
		26-Aug	2	Check antenna alignment
18	TSI			Notate and confirm serial number of TSI camera - Contact mentor (Morris) for additional information
		20-Aug	1	TSI serial # 105 Camera serial# C047 Camera Mac address C047-00-40-8C-44-53-F6
18a	TSI			Replace motherboard on failed TSI computer
		27-Aug		Replaced motherboard
19	LGR			Replace DC/DC converters - ref. ECO-615
				awaiting Darwin testing
20	LGR			Verify Logger serial numbers
		19-Aug	1	Serial numbers: SMET 7115; SKY 5962 ; Gnd 5966 spare 5970 spare 5967
21	UPS			
		20-Aug	1	Replaced batteries 240V APC UPS in E-Van
22	BBSS			Verify Observers using GCS properly
				Receive and store GCS desiccant
		21-Aug		Desiccant hand carried and stored; Hymson operates GCS correctly
		25-Aug		Myra operates GCS correctly
		26-Aug		Taddy operates GCS correctly
23	BBSS			Perform electrolyser routine maintenance
		20-Aug	4	In Progress
		21-Aug	4	Completed

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24	BBSS			Take stock of spares and consumables and ammend resupply report accordingly
		25-Aug	1	Completed resupply check list of BBSS spares with Hymson
25	BBSS			Check and note model and type of RBL light and flourescent tubes it uses
		21-Aug	0.5	Manus RBL Light Type NLE236 Lamp 2 x 36W G13? 26mm Bi-pin Manufac: Nordland Australia
26	HOGEN			Check repaired water supply line
		18-Aug		Checked repair is good
		24-Aug		Repaired another break in water system.
26a	HOGEN			Replace UV lamp
		18-Aug	1	Lamp replaced
27	HOGEN			Replace power supply and perform gas sensor calibration
		18-Aug	1	gas sensor calibration in progress
		19-Aug	1	Gas sensor calibration completed
28	HOGEN			Repair HOGEN and investigate power supply issues
		18-Aug	3	Power supplies replaced
29	HOGEN			Replace HOGEN van combustible gas sensor and adjust sensor voltage as per manufacturer's instructions not to blow up sensor on initial startup
		19-Aug	2	completed
30	WND			Check all anemometer s/n's
		22-Aug	1	Upper anemometer serial# 18422 lower anemometer serial# 49705 spare snemometer serial # 31104
31	OTHER			Review Monthly Resupply Checklist w/ Observers
		25-Aug	1	Reviewed monthly resupply list with Hymson
32	IRT (SKY)			Replace SKYRAD IRT
		18-Aug	1	IRT replaced, serial# 1845 replaced with serial#867 at 03:15utc
33	OTHER			Install new water pump and connect to water tanks; identify suitable wash basin location and measure and note lengths of pipe required to connect to it; check if wash basin can be purchased in Lorengau
		22-Aug	2	Commence preparations
		23-Aug	6	Water pump connected and tested, awaiting local electrician to complete installtion of power outlet
		24-Aug	3	Plumbing completed, suggest buckets be provided on site instead of sink. (no suitable sink available in Lorengau)
34	MWR			Replace Teflon window
			1	Preventative maintenance: teflon window replaced
35	OTHER			Perform routine maintenance per Maintenance Checklist
		19-Aug		In progress
		25-Aug		Routine maintenance complete
36	VANS			Pressure-wash outside of vans
	SHIPPING			List items to be shipped following visit
				Ship replaced SKYRAD IRT to SGP (fwd to PNNL)
				Ship MMCR calibration kit to SGP (fwd to PNNL)
				Ship store vault to Darwin
	FUTURE NEEDS			List items needed for future visits (spares, etc.)

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		24-Aug		Tool replacement required
				2 spare WTP level switches. SAP mat no 101228
				Hogen biannual maintenance kit
				Hogen annual maintenance kit
				Paint to paint VSAT dish
				Paint to seal fibroglass on instrument stands (SKYRAD,GNDRAD)
		24-Aug		HOGEN calibration gas
		24-Aug		HOGEN master power supply
		25-Aug		UV Lamp